Art Unit: 1796

Art Unit: 1/96

Claims 13-27 are pending in his application.

Application/Control Number: 10/590,258

## DETAILED ACTION

## Claim Rejections - 35 USC § 103

- The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all
  obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- Claims 13 and 18-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dias (US 6,540,791 B1).

Dias (US' 791 B1) teaches an aqueous alkali hair dyeing composition comprising reduced vat dyes (see col. 42, lines 39-43), wherein the composition has a pH in the range of 5 to 11 as claimed in claim 13 (see col. 48, lines 48-50), wherein the composition also comprises cationic compounds such as polyquaternium 10 in the amounts of 0.02 to 5% as claimed in claims 18, 19 and 20 (see col. 25, line 57 and col. 26, lines 9-11), developers, couplers and direct dyes as claimed in claims 21-23 (see col. 32, lines 5-65 and col. 41, lines 40-67). Dias also teaches a method for dyeing hair comprising applying to the hair the dyeing composition as described above which is similar to those claimed as claimed in claim 24 (see col. 49, lines 25-36).

The instant claims differ from the reference by reciting a forming of an enediol in the composition due to the addition of the reducing agent compounds in the composition.

However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to formulate such a dyeing composition by utilizing a reduced vat dyes Application/Control Number: 10/590,258

Art Unit: 1796

in the alkaline dyeing composition to arrive at the claimed invention, such a modification is obvious because the reference clearly teaches and suggests the use of vat dyes that transformed by reduction into compounds which are soluble in aqueous alkali medium (see 42, lines 39-42), and, thus, a person of the ordinary skill in the art would expect such a composition to have similar properties to those claimed, absent unexpected results.

3 Claims 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dias (US 6,540,791 B1) in view of Lewis (US 5,364,415).

The disclosure of Dias (US' 791 B1) as claimed in claims 16 and 17, does not teach or disclose the claimed species of the vat dyes in the claimed amounts.

Lewis (US' 415) in analogous hair dyeing formulation, teaches a dyeing composition comprising solublized vat dyes such as Vat Yellow 4 in the brightening amount (see col. 2, lines 20-25 and col. 8, lines 60-68).

Therefore, in view of teaching of the secondary reference, one having ordinary skill in the art at the time the invention was made, would be motivated to formulate such a composition by incorporating the claimed species of the vat dyes as taught by Lewis (US' 415) in the dyeing composition of Dais (US' 791 B1) to arrive at the claimed invention. Such a modification would be obvious because Dias as a primary reference clearly teaches and suggests the use of genus Vat dyes in the dyeing composition. Lewis (US' 415) as a secondary reference clearly teaches and discloses the claimed species of Vat dyes in the brightening amounts, and, thus a person of the ordinary skill in the art would be motivated to incorporate these species in the dyeing composition in optimizing amounts in order to get the maximum effective amount of these dyes

Art Unit: 1796

in the composition with the reasonable expectation of success for improving the dyeing properties of the composition, absent unexpected results.

## Allowable Subject Matter

4 Claims 14-15 and 25-27 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

## Conclusion

5 The references listed on from PTO-1449 have been reviewed by the examiner and are considered to be cumulative to or less material than the prior art references relied upon in the rejection above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eisa B. Elhilo whose telephone number is (571) 272-1315. The examiner can normally be reached on M - F (8:00 -4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pyon Harold can be reached on (571) 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <a href="http://pair-direct.uspto.gov">http://pair-direct.uspto.gov</a>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

Application/Control Number: 10/590,258 Page 5

Art Unit: 1796

like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Eisa B Elhilo/ Primary Examiner, Art Unit 1796 June 13, 2008